Listing of the Claims:

1. (Previously Amended) An armor capable of withstanding penetration by a projectile impacting the armor, the armor comprising at least one layer of a metallic material that absorbs energy from the impacting projectile and is selected from at least one of a metallic material that undergoes a reversible phase change upon absorbing energy and a metallic material that exhibits an elastic strain deformation of at least 5%.

2. (Previously Amended) The armor of claim 1, wherein the armor comprises a plurality of layers, including a first layer of said metallic material.

3. (Cancelled)

4. (Original) The armor of claim 1, wherein said material undergoes a reversible endothermic phase change when heated to a predetermined temperature.

5. (Original) The armor of claim 4, wherein said predetermined temperature is at least -50°C and is no greater than 200°C.

6. (Previously Amended) The armor of claim 5, wherein said metallic material is selected from the group consisting of nickel-titanium alloys, copper-zinc alloys, and copper-aluminum-nickel-manganese alloys.

7. (Previously Amended) The armor of claim 6, wherein said metallic material is an alloy consisting essentially of 45 up to 55 atomic percent nickel, 45 up to 55 atomic percent titanium, and incidental impurities.

8. (Previously Amended) The armor of claim 7, wherein said metallic matérial is Nitinol.

9. (Previously Amended) The armor of claim 1, wherein the armor comprises a first plate including a first energy absorbing layer and a second energy absorbing layer, wherein said first energy absorbing layer is a layer of a metallic material that absorbs energy by a reversible phase change, and wherein said second energy absorbing layer is a layer of a metallic material that absorbs energy by elastic deformation and exhibits elastic strain of at least 5%.

10. (Previously Amended) The armor of claim 2, wherein said first layer is a first plate, the armor further comprising a second plate, said second plate comprising a material that differs from said metallic material.

11. (Original) The armor of claim 10, wherein said second plate comprises a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

12. (Currently Amended) The armor of claim 11, wherein said second plate comprises an α titanium alloy that is at least one of grades 1-4 CPTi.

13. (Currently Amended) The armor of claim 11, wherein said second plate comprises an $\alpha\beta$ titanium alloy that is Ti(6-4).

14. (Currently Amended) The armor of claim 11, wherein said second plate comprises a β titanium alloy that is at least one of Ti(10-2-3) and Ti(15-3-3-3).

15. (Original) The armor of claim 10, wherein said second plate is contiguous with said first plate.

16. (Original) The armor of claim 15, wherein said second plate is diffusion bonded to said first plate.

17. (Previously Amended) The armor of claim 10, further comprising a third plate disposed opposite said second plate and comprised of a material that differs from said metallic material.

18. (Previously Amended) The armor of claim 17, wherein said third plate comprises a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

19. (Previously Amended) The armor of claim 2, wherein said first layer is a first plate and said metallic material comprises an alloy consisting essentially of 45 up to 55 atomic percent nickel, 45 up to 55 atomic percent titanium, and incidental impurities, the armor further comprising a second plate including a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

20. (Original) The armor of claim 19, wherein said first plate is contiguous with said second plate.

21. (Original) The armor of claim 19, further comprising a third plate disposed opposite said second plate and comprising a material that differs from said first plate.

22. (Previously Amended) The armor of claim 21, wherein said third plate comprises a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

23. (Previously Amended) The armor of claim 21, wherein said first plate is contiguous with said third plate.

24. (Previously Amended) A method of making an armor plate, wherein the armor is capable of withstanding the impact of a projectile impacting the armor, the method comprising:

providing a first plate comprising at least one energy absorbing layer of a metallic material that absorbs energy from the impacting projectile by at least one mechanism selected from a reversible phase change and an elastic strain deformation of at least 5%;

providing a second plate of a material differing from the first plate;

contacting the first plate and the second plate; and

bonding the first plate to the second plate and, optionally, reducing a thickness dimension of the first plate and the second plate.

25. (Previously Amended) The method of claim 24, wherein the first plate comprises a first energy absorbing layer and a second energy absorbing layer, wherein one of said first energy absorbing layer and said second energy absorbing layer is a layer of said metallic material, and wherein said first energy absorbing layer contacts said second energy absorbing layer.

26. (Previously Amended) The method of claim 24, wherein contacting surfaces of the first plate and the second plate are cleaned before contacting the first plate and the second plate.

27. (Previously Amended) The method of claim 24, wherein the metallic material undergoes a reversible endothermic phase change when heated to a predetermined temperature.

28. (Original) The method of claim 27, wherein the predetermined temperature is at least -50°C and is no greater than 200°C.

29. (Previously Amended) The method of claim 28, wherein the metallic material is selected from the group consisting of nickel-titanium alloys, copper-zinc alloys, and copper-aluminum-nickel-manganese alloys.

30. (Original) The method of claim 29, wherein the first plate is of an alloy consisting essentially of 45 up to 55 atomic percent nickel, 45 up to 55 atomic percent titanium, and incidental impurities.

31. (Original) The method of claim 24, wherein the second plate comprises a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

32. (Previously Amended) The method of claim 31, wherein the second plate comprises at least one of grades 1-4 CPTi.

33. (Previously Amended) The method of claim 31, wherein the second plate comprises Ti(6-4).

34. (Previously Amended) The method of claim 31, wherein the second plate comprises at least one of Ti(10-2-3) and Ti (15-3-3-3).

35. (Original) The method of claim 24, wherein bonding the first plate and the second plate comprises:

heating the first plate and second plate; and

applying bonding pressure to the first plate and the second plate to provide a metallurgical bond.

36. (Original) The method of claim 35, wherein applying bonding pressure to the first plate and the second plate comprises rolling the first plate and the second plate.

37. (Original) The method of claim 24, further comprising:

providing a third plate of a material differing from the first plate;

disposing the third plate opposite the second plate;

contacting the third plate and the first plate; and

bonding the first plate to the third plate.

38. (Previously Amended) The method of claim 37, wherein contacting surfaces of the first plate and the third plate are cleaned before contacting the first plate and the third plate.

39. (Original) The method of claim 37, wherein the third plate comprises a material selected from the group consisting of titanium, gamma phase titanium-aluminum, α titanium alloy, β titanium alloy, and $\alpha\beta$ titanium alloy.

40. (Previously Amended) The method of claim 39, wherein the third plate comprises at least one of grades 1-4 CPTi.

41. (Previously Amended) The method of claim 39, wherein the third plate comprises Ti(6-4).

42. (Previously Amended) The method of claim 39, wherein the third plate comprises at least one of Ti(10-2-3) and Ti (15-3-3-3).

43. (Original) The method of claim 37, wherein bonding the first plate and the third plate comprises:

heating the first plate and third plate; and

applying bonding pressure to the first plate and the third plate to provide a metallurgical bond.

44. (Original) The method of claim 43, wherein applying bonding pressure to the first plate and the third plate comprises rolling the first plate and the third plate.

45. (Previously Amended) An article of manufacture including an armor capable of resisting penetration by a projectile impacting the armor, the armor comprising at least one layer of a metallic material that absorbs energy from the impacting projectile and is selected from a metallic material that undergoes a reversible

phase change upon absorbing energy and a metallic material that exhibits an elastic strain deformation of at least 5%.

46. (Original) The article of manufacture of claim 45, wherein the article is an armored vehicle.

47. (Previously Amended) A method of absorbing energy from a projectile, the method comprising forming an armor comprising at least one layer of a metallic material that absorbs energy from the projectile impacting the armor, wherein said metallic material is selected from at least one of a metallic material that undergoes a reversible phase change upon absorbing energy and a metallic material that exhibits an elastic strain deformation of at least 5%.

48. (Previously Amended) The method of claim 47, wherein the armor comprises a plurality of layers, including a layer of said metallic material.

49. (Previously Amended) The method of claim 47, wherein said metallic material is selected from the group consisting of nickel-titanium alloys, copper-zinc alloys, and copper-aluminum-nickel-manganese alloys.

50. (Previously Added) A method of protecting an article of manufacture against penetration from an impacting projectile, the method comprising applying to the article of manufacture an armor capable of withstanding penetration from the impacting projectile, the armor comprising at least one layer of a metallic material that absorbs energy from the projectile impacting the armor, wherein the metallic material is selected from at least one of a metallic material that

undergoes a reversible phase change upon absorbing energy and a metallic material that exhibits an elastic strain deformation of at least 5%.

51. (Previously Added) The method of claim 50, wherein the armor comprises a plurality of layers, including at least one layer of the metallic material.

52. (Previously Added) The method of claim 50, wherein the metallic material is selected from the group consisting of nickel-titanium alloys, copper-zinc alloys, and copper-aluminum-nickel-manganese alloys.

53. (Previously Added) The method of claim 50, wherein the metallic material consists essentially of 45 up to 55 atomic percent nickel, 45 up to 55 atomic percent titanium, and incidental impurities.

54. (Previously Added) The method of claim 50, wherein the metallic material is Nitinol.